

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for selecting ~~the~~ a clock signal in a baseband combiner of a space-diversity receiver, said ~~combiner comprising:~~

~~an input for main signal;~~

~~at least one additional input for a diversity signal;~~

~~an equalizer receiving at its input said main signal, filtered and sampled and outputting a~~
~~corresponding equalized main signal;~~

~~at least one additional corresponding equalizer receiving at its input said at least one~~
~~diversity signal, filtered and sampled; and outputting a corresponding equalized diversity signal;~~

~~and~~

~~a clock recovery circuit;~~

~~the method comprising: the step of driving said~~ a clock recovery circuit by means of one
of said a main signal, filtered and sampled, and said at least one diversity signal, filtered and
sampled, and

equalizing said main and diversity signals;

~~wherein the step of driving of said clock recovery circuit by means of either one or the~~
~~other signal in turn comprises the steps of:~~

calculating the average power of the equalized main signal and the average power of the at least one equalized diversity signal, and

driving the clock recovery circuit by means of the sampled signal chosen on the basis of a comparison between the average power of the main and diversity equalized signals.

2. (currently amended): A method according to claim 1, ~~wherein it further comprises the steps of~~ further comprising:

providing a ~~Main-main~~ main positive constant;

multiplying said main positive constant by the average power of the equalized main signal; and, in the instance where at the preceding time of processing the clock recovery circuit driving signal was the main signal, possibly filtered and sampled,

driving the clock recovery circuit by means of said at least one diversity signal, possibly filtered and sampled, ~~if and only if~~ when the average power of the at least one equalized diversity signal is greater than the product of the main positive constant by the average power of the equalized main signal.

3. (currently amended): A method according to claim 1, ~~wherein it further comprises the steps of~~ further comprising:

providing for a diversity positive constant;

multiplying said diversity positive constant by the average power of the equalized diversity signal; and, in the instance where at the preceding time of processing, the signal that was driving the clock recovery circuit was the diversity signal, possibly filtered and sampled,

driving the clock recovery circuit by means of said at least one main signal, possibly filtered and sampled, ~~if and only if~~when the average power of the at least one equalized main signal is greater than the product of the diversity positive constant by the average power of the equalized diversity signal.

4. (original): A baseband combiner of a space-diversity receiver, said combiner comprising:

an input for a main signal;

at least one additional input for a diversity signal;

an equalizer receiving at its input said main signal, filtered and sampled, and outputting a corresponding equalized main signal;

at least one corresponding additional equalizer receiving at its input said at least one diversity signal, filtered and sampled, and outputting a corresponding equalized diversity signal, and

a clock recovery circuit, said clock recovery circuit being driven by one of said main signal, filtered and sampled, and said at least one diversity signal, filtered and sampled,

wherein the combiner further comprises:

means for calculating the average power of the equalized main signal and the average power of the at least one equalized diversity signal,

means for performing the comparison between the average power values, the clock recovery circuit being driven by means of the sampled signal chosen on the basis of a comparison between the average power of the equalized signals.

5. (currently amended): A combiner according to claim 4, ~~wherein it further comprises~~ comprising means for multiplying the average power values by respective positive constants and wherein said comparison means perform the comparison between the average power values and the products of the average powers by respective positive constants.

6. (currently amended): A combiner according to claim 5, ~~wherein it further comprises~~ comprising selection means for selecting the driving signal according to the result of the comparison performed by the comparison means.